

TWO NEW SPECIES OF PHORIDÆ FROM BALTIC AMBER.<sup>1</sup>

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Some years ago, while examining a small series of amber-insects, now in the collections of the museum of the University of Königsberg, I chanced upon a beautifully preserved specimen of the family Phoridæ. This species, which is described below as *Dohrinphora transita* is in a small piece of amber together with an hymenopterous insect representing an undescribed genus of Bethyridæ. A second species included in the same lot proves also to be new.

The occurrence of Phoridæ in Baltic amber was noted many years ago by Behrendt<sup>2</sup> and soon afterwards Loew<sup>3</sup> mentioned the existence of eleven species of this family in amber that had passed through his hands. Much more recently the present writer<sup>4</sup> has described two species from the Miocene shales of Florissant Colorado. In 1909 Meunier<sup>5</sup> described and figured a number of species from amber. Unfortunately, it is very difficult to recognize his species as the descriptions are based to a great extent upon characters not generally used, and many important diagnostic characters are not included. In spite of these difficulties I am quite certain that the two species described below are different from any of those dealt with by Meunier.

The first one differs from all previously known species by the presence of a broad, flattened enlargement before the tip of the third longitudinal wing vein, a character which seems to form a transition between the recent species of *Hypocera* and those of the more generalized genera with forked third vein, since a number of species of *Hypocera* show a very similar swelling at the tip of the third vein. They lack the second vein, however, which is present in the fossil species.

<sup>1</sup>Contribution from the Entomological Laboratory of the Bussey Institution, Harvard University, No. 219.

<sup>2</sup>Organische Reste im Bernstein, vol. 1, p. 57 (1845).

<sup>3</sup>Ueber den Bernstein und die Bernsteinfauna, Progr. Königl. Realsch. Meseritz, 1850. pp. 1-44.

<sup>4</sup>Bull. American Mus. Nat. Hist. vol. 24 pp. 273-275.

<sup>5</sup>Monographie der Leptiden und Phoriden des Bernsteins, Jahrb. Königl. Preuss. Geol., Landesanst., vol. 30, pp. 64-90, 5 pls.

**Dohrniphora transita** sp. nov.

Sex? Length 3 mm. A stout species with well developed bristles on the hind legs. Two median supra-antennal bristles reclinate, strong, but rather short and divergent. Lower row of four frontal bristles forming a straight transverse line, the bases of the lateral bristles close to the lower angles of the front. Next row forming a curved line, all four bristles equidistant. Upper transverse row normal. Post-ocular cilia strong, not enlarged below. Antennæ rather small, round; arista short and very slender. Mesonotum with a single pair of dorso-central macrochaetæ; scutellum with a pair of small lateral bristles and also two stronger bristles on the hind margin. Abdomen completely clouded, so that its structure cannot be observed. Anterior tibiæ each with a single bristle at the middle on the front side; middle tibiæ each with a similar one at the basal third, and also perhaps just before the tip which is not visible. Hind femora stout, fringed with short hairs along the lower edge. Hind tibia with a strong bristle at the end of the basal third; a pair at the middle, one of these bristles on the outer and the other one on the hind side; also with two shorter bristles just before the tip, and, so far as can be seen, with at least one stout spur. Costal vein not extending beyond the middle of the wing, its cilia delicate and very long, although most of the cilia have been broken off in the single specimen before me. First vein very long, its tip twice as far removed from the mediastinal vein as from the apex of the third vein; on its basal two-thirds it runs almost parallel to the costa, bending sharply forwards apically to meet the costa. Second vein short, the angle of furcation very close to the tip of the third vein. Third vein with a large, oval spot or swelling extending from the fork halfway to the apex of the vein; although this spot scarcely extends over the anterior edge of the vein, it is broadened out behind into a strong bow. Fourth vein straight, except at base, where it is weakly curved; originating opposite the fork of the third; fifth vein almost parallel to the fourth, slightly bent forward on its basal third; sixth and seventh veins present, straight.

Similar in size to *Dohrniphora ablata* Meunier, but the antennae are small and the apical half of the anterior tibia bears no bristles, while the apical swelling on the third wing-vein described above will serve to distinguish it immediately.

***Dohrniphora loewi* sp. nov.**

♂. Length 2 mm. Apparently brown in color, with the legs light brown; head and abdomen above more or less blackened. All frontal bristles reclinate, strong, but not greatly lengthened. Post-ocular cilia small and densely placed. Antennae rather small, the third joint globular, almost bare, and only a little shorter than the width of the head. Palpi clouded, their apical bristles which are clearly to be seen, however, are strongly developed and densely placed. Front apparently at least as high as broad, perhaps higher, slightly convex. Cheeks each with a single downwardly directed bristle. Mesonotum bearing only a few fine hairs, as long as wide and strongly convex, on each side with four marginal bristles, of which two lie before and two behind the insertion of the wing; only one pair of dorsocentral macrochaetae present. Scutellum with four marginal bristles of which the anterior pair are slightly weaker. Abdomen one-third longer than the head and thorax together, uniformly narrowed toward the tip; second and sixth segments elongated, the second without tufts of hairs at the sides. Seventh segment, seen from above, furnished with a row of short bristles along the posterior margin. Hypopygium small. Legs not thickened; the hind femora broadened, but without distinct hairs on the lower margin. Front tarsi distinctly thickened, the second and third joints each quadrate; front tibiae with a single large bristle on the outer side just before the middle. Middle tibiae with a pair of strong bristles at the basal third; hind tibiae each with only a single bristle at the basal third and with two apical spurs of which the inner one is much more strongly developed. Wings apparently entirely hyaline; costal vein only one third as long as the wing, thickened toward the apex, with very fine cilia that are visible only under considerable magnification; first vein very long, its tip three times as far from the mediastinal

vein as from the tip of the third vein; second vein entering the costa at a point equidistant from the tips of the first and third veins; fourth vein almost straight, reaching the margin far before the wing-tip: fifth vein almost stright, entering the margin far beyond the wing tip; sixth vein with a sigmoid flexure; seventh vein obsolete.

Type, No. B243, imbedded in a piece of amber with a specimen of an ant.

The present species resembles two amber forms described by Meunier (*op. cit.*) but appears to be quite distinct; from "*Phora*"<sup>1</sup> *inclusa* Meun. it differs in having two basal bristles on the middle tibiae and by being much larger, 2 mm. instead of 1 mm. From *D. concinna* Meun. It differs by the presence of a large bristle near the base of the front tibia and by having only one preapical bristle on the hind tibia.

<sup>1</sup>Whether this species is a Dohniphora or Paraspiniphora cannot be determined, as the apical portion of the middle tibiae are not visible in the type, according to Meunier's description.